IN THE CLAIMS:

Please amend the claims as follows.

Claim 1 (Canceled).

Claim 2 (Currently Amended): The back illuminated photodetector according to Claim [[1]] 4, further comprising a supporting film provided on the first surface of the semiconductor substrate to support the semiconductor substrate.

Claim 3 (Original): The back illuminated photodetector according to Claim 2, further comprising a filling electrode penetrating through the supporting film and connected electrically to the doped semiconductor region at the one end thereof.

Claim 4 (Currently Amended): A back illuminated photodetector comprising:

a first conductor type semiconductor substrate;

a second conductive type doped semiconductor region provided in a first superficial surface layer of the semiconductor substrate;

a recessed portion for incidence of to-be-detected light formed in the second surface of the semiconductor substrate and in an area opposite the doped semiconductor region; and

a coating layer made of resin for transmitting the to-be-detected light, the coating layer being provided on the second surface,

the coating layer being arranged in such a manner that the portion provided on the recessed portion in the second surface is sunk lower than the portion provided on the outer edge portion of the recessed portion; and

~~The back illuminated photodetector according to Claim 1~~[[,]] wherein a highly-doped semiconductor region with impurities of the first conductive type added thereto at a high concentration is exposed across the entire side surface of the semiconductor substrate.

Claim 5 (Currently Amended): A back illuminated photodetector comprising:

a first conductor type semiconductor substrate;

a second conductive type doped semiconductor region provided in a first superficial surface layer of the semiconductor substrate;

a recessed portion for incidence of to-be-detected light formed in the second surface of the semiconductor substrate and in an area opposite the doped semiconductor region; and

a coating layer made of resin for transmitting the to-be-detected light, the coating layer being provided on the second surface,

the coating layer being arranged in such a manner that the portion provided on the recessed portion in the second surface is sunk lower than the portion provided on the outer edge portion of the recessed portion; and

~~The back illuminated photodetector according to Claim 1~~[[,]] wherein a highly-doped semiconductor layer with impurities of the first conductive type added thereto at a high concentration is provided in the bottom portion of the recessed portion within [[the]] a second superficial surface layer of the semiconductor substrate.

Claim 6 (Currently Amended): A back illuminated photodetector comprising:

a first conductor type semiconductor substrate;

a second conductive type doped semiconductor region provided in a first superficial surface layer of the semiconductor substrate;

a recessed portion for incidence of to-be-detected light formed in the second surface of the semiconductor substrate and in an area opposite the doped semiconductor region; and

a coating layer made of resin for transmitting the to-be-detected light, the coating layer being provided on the second surface,

the coating layer being arranged in such a manner that the portion provided on the recessed portion in the second surface is sunk lower than the portion provided on the outer edge portion of the recessed portion; and

~~The back illuminated photodector according to Claim 1~~[[,]] wherein a highly-doped semiconductor layer with impurities of the first conductive type added thereto at a high concentration is provided in [[the]] a second superficial surface layer in the outer edge portion of the semiconductor substrate.

Claim 7 (New): The back illuminated photodetector according to Claim 5, further comprising a supporting film provided on the first surface of the semiconductor substrate to support the semiconductor substrate.

Claim 8 (New): The back illuminated photodetector according to Claim 7, further comprising a filling electrode penetrating through the supporting film and connected electrically to the doped semiconductor region at the one end thereof.

Claim 9 (New): The back illuminated photodetector according to Claim 6, further comprising a supporting film provided on the first surface of the semiconductor substrate to support the semiconductor substrate.

Claim 10 (New): The back illuminated photodetector according to Claim 9, further comprising a filling electrode penetrating through the supporting film and connected electrically to the doped semiconductor region at the one end thereof.